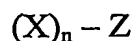


**CLAIMS:**

1. A PYY agonist derivative of the formula:



wherein X is a radical 9-fluorenylmethoxycarbonyl (Fmoc) or 2-sulfo-9-fluorenyl-methoxycarbonyl (FMS), Z is the residue of a PYY agonist linked to the radical X through an amino or hydroxyl group, and n is 1 to 3, or a pharmaceutically acceptable salt thereof.

2. A PYY agonist derivative of claim 1, wherein the PYY agonist is PYY of the sequence represented by [SEQ ID NO.: 1]:

YPIKPEAPGEDASPEELNRYYYASLRHYLNLVTRQRY-NH<sub>2</sub>

3. A PYY agonist derivative of claim 1, wherein the PYY agonist is PYY<sub>3-36</sub> of the sequence represented by [SEQ ID NO.: 2]:

IKPEAPGEDASPEELNRYYYASLRHYLNLVTRQRY-NH<sub>2</sub>

4. The PYY agonist derivative of claim 1 selected from the group consisting of the derivatives herein designated Fmoc-PYY, (Fmoc)<sub>2</sub>-PYY, (Fmoc)<sub>3</sub>-PYY, FMS-PYY, (FMS)<sub>2</sub>-PYY and (FMS)<sub>3</sub>-PYY.

5. The PYY agonist derivative of claim 1 selected from the group consisting of the derivatives herein designated Fmoc-PYY<sub>3-36</sub>, (Fmoc)<sub>2</sub>-PYY<sub>3-36</sub>, (Fmoc)<sub>3</sub>-PYY<sub>3-36</sub>, FMS-PYY<sub>3-36</sub>, (FMS)<sub>2</sub>-PYY<sub>3-36</sub>, and (FMS)<sub>3</sub>-PYY<sub>3-36</sub>.

6. The PYY agonist derivative herein designated (FMS)<sub>2</sub>-PYY<sub>3-36</sub>, of the sequence represented by [SEQ ID NO.: 3].

7. A pharmaceutical composition comprising a PYY agonist derivative according to any one of claims 1 to 6, and a pharmaceutically acceptable carrier.

8. A pharmaceutical composition comprising (FMS)<sub>2</sub>-PYY<sub>3-36</sub> and a pharmaceutically acceptable carrier.

9. The pharmaceutical composition according to claim 7 for reduction of food intake.

5 10. The pharmaceutical composition according to claim 8 for reduction of food intake.

11. The pharmaceutical composition according to claim 7 for treatment of diseases, conditions or disorders which can be alleviated by reduction of food intake.

10 12. The pharmaceutical composition according to claim 8 for treatment of diseases, conditions or disorders which can be alleviated by reduction of food intake.

13. The pharmaceutical composition according to claim 11 for treatment of obesity.

15 14. A pharmaceutical composition for the treatment of obesity comprising an obesity treating amount of (FMS)<sub>2</sub>-PYY<sub>3-36</sub>, and a pharmaceutically acceptable carrier.

15. The pharmaceutical composition according to claim 11 wherein said disease, condition or disorder is hypertension, dyslipidemia, cardiovascular risk, insulin-  
20 resistance, or diabetes mellitus.

16. The pharmaceutical composition according to claim 12 wherein said disease, condition or disorder is hypertension, dyslipidemia, cardiovascular risk, insulin-resistance, or diabetes mellitus.

17. A method for reduction of food intake which comprises administering to an  
25 individual in need an effective amount of a PYY agonist derivative of claim 1.

18. A method for treatment of a disease, condition or disorder that can be alleviated by reduction of food intake which comprises administering to an individual in need an effective amount of a PYY agonist derivative of claim 1.

19. The method according to claim 14 wherein said disease or disorder is obesity.

20. The method according to claim 14 wherein said disease or disorder is hypertension, dyslipidemia, cardiovascular risk, eating disorder, insulin-resistance, or diabetes mellitus.

21. A method of treating obesity in an individual comprising administering to said individual a therapeutically effective amount of  $(FMS)_2$ -PYY<sub>3-36</sub>, or a pharmaceutically acceptable salt thereof.

22. A method of inducing weight loss in an individual comprising administering to said individual a therapeutically effective amount of a PYY agonist derivative of claim 1 or a pharmaceutically acceptable salt of said compound.

23. A method of inducing weight loss in an individual comprising administering to said individual a therapeutically effective amount of  $(FMS)_2$ -PYY<sub>3-36</sub>, or a pharmaceutically acceptable salt thereof.